IN THE CLAIMS:

8. (Currently amended) A biosorbent composition comprising a support material ~~coated with~~ comprising a ceramic or perlite and bearing an exterior coating of chitosan thereon ~~useful for the treatment of wastewater wherein said chitosan has an affinity for adsorption of metals from wastewater~~.

9. (Currently amended) The biosorbent composition of claim 8 wherein said biosorbent composition is ~~useful~~ configured to remove ~~for removing~~ heavy metals from wastewater upon contact of said biosorbent composition with the wastewater for a sufficient amount of time.

10. (Currently amended) The biosorbent composition of claim 8 wherein said support material comprises ceramic alumina, ceramic silica or both ~~a ceramic support material~~.

11. (Currently amended) The biosorbent composition of claim [[8]] 10 wherein said ~~biosorbent composition is prepared by dip coating chitosan gel on to said~~ support material is ceramic alumina, ceramic silica or a combination thereof.

12. (Currently amended) The biosorbent composition of claim [[11]] 10 wherein said support material ~~comprises a~~ is ~~ceramic~~ perlite ~~support material~~.

13. (Currently amended) The biosorbent composition of claim ~~10~~ 8 wherein said exterior coating is exposed to a fluid environment ~~biosorbent composition is prepared by spin coating chitosan gel on to said support material~~.

14. (Currently amended) [[A]] The biosorbent composition of claim ~~13~~ 8 wherein said ~~support material comprises ceramic alumina or silica, and wherein oxalic acid is used to bind the~~ chitosan is in gel form ~~to the support material~~.

15. (Currently amended) A process for treating an aqueous ~~systems~~ system containing a heavy ~~metals~~ metal, the process comprising adding ~~a chitosan-coated biosorbent~~ to ~~an~~ the aqueous system a biosorbent composition, the biosorbent composition comprising a support material comprising a ceramic or perlite and bearing an exterior coating of chitosan

thereon ~~wherein said chitosan has an affinity for adsorption of said heavy metals from the aqueous system~~.

16.   (Currently amended) The process of claim 15 wherein said ~~chitosan-coated biosorbent comprises a~~ support material comprises a ceramic ~~and coated with chitosan gel~~.

17.   (Currently amended) The process of claim 15 wherein said support material ~~comprises~~ is a ceramic ~~support material~~.

18.   (Currently amended) The process of claim 15 wherein the aqueous ~~systems are~~ system is an aqueous waste stream ~~streams~~.

19.   (Currently amended) ~~A biosorbent composition~~ The process of claim 17 wherein the support material is ceramic alumina, ceramic silica, or a combination thereof ~~comprising a support material coated with chitosan, its equivalents and the like useful for the treatment of wastewater wherein said chitosan has an affinity for adsorption of metals from wastewater~~.

21.   (Currently amended) A process for treating an aqueous ~~systems~~ system containing a heavy ~~metals~~ metal, the process comprising adding ~~a biosorbent~~ to ~~an~~ the aqueous system~~, wherein~~ said the biosorbent composition of claim 11 ~~comprises a coating of chitosan, its equivalents and the like wherein said chitosan has an affinity for adsorption of heavy metals from the aqueous system~~.

23.   (Currently amended) The biosorbent composition of claim 10 wherein said ~~ceramic support material comprises perlite~~ chitosan is in dried gel form.

24.   (Currently amended) The process of claim ~~17~~ 15 wherein said support material comprises perlite.

25.   (Currently amended) [A] The biosorbent composition of claim 8 ~~comprising a support material coated with chitosan useful for the treatment of wastewater~~

wherein said chitosan is adhered to the support material by electrostatic forces, van der Waals forces and/or hydrogen bonding.

26. (Currently amended) A process for treating an aqueous ~~systems~~ system containing a heavy ~~metals~~ metal, the process comprising adding the biosorbent composition of claim 25 ~~a chitosan-coated biosorbent~~ to ~~an~~ the aqueous system ~~wherein said chitosan is adhered to the support material by electrostatic forces, van der Waals forces and/or hydrogen bonding~~.

27. (Currently amended) [A] The biosorbent composition of claim 8 wherein the biosorbent composition consists ~~consisting~~ essentially of a support material comprising a ceramic or perlite and bearing an exterior coating of chitosan thereon ~~a support material coated with chitosan useful for the treatment of wastewater~~.

28. (Currently amended) A process for treating an aqueous ~~systems~~ system containing a heavy ~~metals~~ metal, the process comprising adding [a] the biosorbent composition of claim 27 to ~~an~~ the aqueous system ~~wherein said biosorbent consists essentially of a support material coated with chitosan~~.

29. (Currently amended) The biosorbent composition of claim ~~14~~ 8, wherein the ~~ceramic~~ support material is ultrafine ceramic alumina.

30. (Currently amended) The biosorbent composition of claim 8, wherein said support material is ceramic alumina, and said ~~biosorbent composition is prepared by coextrusion encapsulation or fluidized bed~~ exterior coating ~~the~~ is derived from acid-treated chitosan gel ~~onto said support material~~.

31. (Currently amended) The biosorbent composition of claim 11, wherein the support material ~~is coated twice with~~ bears a double coating of chitosan.

32. (Currently amended) The biosorbent composition of claim 8, wherein the chitosan has an affinity for adsorption of cesium, thorium, lead, mercury, arsenic, chromium, copper, or nickel from wastewater.

33.   (New) The biosorbent composition of claim 13 wherein the fluid environment is air or water containing a contaminant removable by exposure to the biosorbent composition.

34.   (New) The biosorbent composition of claim 33 wherein the water is wastewater.

35.   (New) The biosorbent composition of claim 35 wherein the contaminant is a heavy metal.

36.   (New) The biosorbent composition of claim 14 wherein the fluid environment is air or water containing a contaminant removable by exposure to the biosorbent composition.

37.   (New) The biosorbent composition of claim 36 wherein the water is wastewater.

38.   (New) The biosorbent composition of claim 37 wherein the contaminant is a heavy metal.

39.   (New) The process of claim 17 wherein said support material is ceramic alumina or ceramic silica, the aqueous system comprises an aqueous fluid and adding the biosorbent composition exposes the exterior coating to the aqueous fluid.

40.   (New) A method for preparation of the biosorbent composition of claim 8, comprising treating chitosan with acid to produce a gel, treating a ceramic or perlite with acid to produce the support material, and contacting the support material with the gel, thereby to form the biosorbent composition comprising an exterior chitosan coating on the support material.

41.   (New) The method of claim 41, further comprising a step wherein the biosorbent composition produced by the method of claim 40 is an intermediate composition and, after the formation of the intermediate composition, the intermediate composition is contacted with the gel to coat the intermediate composition with chitosan, thereby producing a second

biosorbent composition, the second biosorbent composition having an exterior chitosan coating thicker than the exterior chitosan coating of the intermediate composition.

42.   (New) The method of claim 40 wherein the ceramic or perlite is ceramic.

43.   (New) The method of claim 41 wherein the ceramic or perlite is ceramic.

44.   (New) The method of claim 42 wherein the ceramic is ceramic alumina.

45.   (New) The method of claim 43 wherein the ceramic is ceramic alumina.

46.   (New) The method of claim 42 wherein the ceramic is ceramic silica.

45.   (New) The method of claim 43 wherein the ceramic is ceramic silica.

46.   (New) The method of claim 42 wherein the ceramic is a combination of ceramic alumina and ceramic silica.

47.   (New) The method of claim 43 wherein the ceramic is a combination of ceramic alumina and ceramic silica.

48.   (New) The method of claim 40 wherein the ceramic or perlite is perlite.

48.   (New) The method of claim 41 wherein the ceramic or perlite is perlite.

REMARKS:

Favorable reconsideration of the rejection of claims 8-13, 19, 23, 25, 27 and 30-32 as being anticipated by or obvious over the Lihme et al. patent is respectfully requested. The noted claims have been amended to clarify or emphasize at least one of the distinctions of the present invention over the disclosure of the Lihme et al. patent. In particular, the amendments clarify or emphasize that the support material is ceramic or perlite and bears an exterior coating of chitosan. This configuration with such support materials in combination has been found to yield surprisingly superior biosorption of heavy metals. For example, the subject specification notes explicitly at page 6, lines 27-30, that the biosorbent of the subject invention has been